CMPT481 Project Proposal

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ABSTRACT
Polygons and stuff

ACM Classification Keywords
H.5.2 Information Interfaces and Presentation: Miscellaneous—*Optional sub-category*

General Terms
See list of the limited ACM 16 terms in the instructions, see http://www.sheridanprinting.com/sigchi/generalterms.htm.

PROBLEM

1. Current Budgeting apps are not user friendly
2. It's tough visualize how much we're spending on what
3. It's tough to input expenses/costs, clunky interfaces and cost entry
4. Difficulties discourage people from actually tracking their expenses

(Include crappy interface photos here)

MOTIVATION

1. Want to display data clearly at a glance in a way that encourages action
2. Allow people to understand where they're using their money
3. Encourage saving money
4. Improve transparency in your budget
5. Reduce friction in inputting expenses so people actually do it.
6. Mobile friendly solution
7. Budgeting apps are only useful if people log ALL expenses, so it needs to be effortless.

SOLUTION

Our application seeks to address the aforementioned problems by implementing a simple-to-use interface that streamlines the experience by omitting any unnecessary frills and features in an attempt to focus the user on the areas that are most important. Our application will feature a 'Quick Expense' screen which allows users to enter an expense in its category in a matter of seconds. We will experiment with the trade-off between accuracy and ease-of-use, for example omitting the cents portion of cost inputs to simplify the interface.

Another component of ease-of-use is availability, which we provide by implementing the system as a mobile friendly web application which can be accessed from anywhere internet is available. This ensures that the user has access to the application at the time that they are completing transactions.

The primary action of viewing spending habits involves presenting data in a way that is easy for the consumer to both view and act upon. The most important metric of past spending is how the amount spent in each category relates to their expected cost in that area. This application will allow views of expenses over time filterable by category; the amount spent in the category will be contrasted with the expected amount spent in that category over that time interval as predicted by the user. This allows the user to determine areas where there is a misalignment between their actions and intentions giving them an actionable area of improvement.

Steps to Solution

Several steps are required to achieve our goals. We will begin by prototyping several user-interfaces which facilitate our primary actions. We may involve external parties to determine which interfaces are the easiest to understand in an attempt to make the interface as self-evident as possible. This stage should result in a prototype for the 'Quick Expense' screen, one for the 'Expenses Viewer' screen, and a notion for how to tie the two screens together.

At this point we may begin to consider our implementation, and will take time to examine possible data models and system infrastructure. We should ensure that our models are flexible enough to adapt to the inevitable changes that will occur during the concrete implementation stage.

Once we have an understanding of how our application will be linked together we may begin our implementation. We

will start by implementing an MVP (minimal viable product) which has the bare minimum functionality in each section so that we can get a feel for how the application operates. We will then perform progressive enhancement on each component until we are satisfied.

We will require a REST-ful API for any data that will be persisted. We will of course need to implement the views and behaviour for the 'Quick Expense' and 'Expenses Viewer' screens. Since user experience is a top priority we will spend significant time improving look and feel through styling and animations.

EVALUATION

1. Time a user inputting expenses on our app vs. competitors (ours should be faster)
2. Time a user as they evaluate their spending on our app vs competitors
3. Qualitative comparisons of ease of use vs competitors
4. Qualitative representation of how enjoyable navigating and using the app is.